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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,672	06/01/2001	Ryota Sugimoto	018961-054	8651

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EXAMINER

MATHEW, FENN C

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3764

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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09/870,672

06/01/2001

Sugimoto, Ryota

EXAMINER

FENN, MATHEW

ART UNIT

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3764

20070917

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Commissioner for Patents

On page 3 of the Examiner's Answer filed 03/23/2007, please delete the paragraphs prior to the heading '(10) Response to Argument' and insert the following paragraphs:

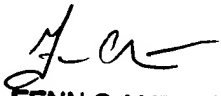
--Claims 1, 4, 5, 9-13, 20, 22-23, 32-37, and 38-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanley in view of Palmaz. Shanley discloses an implantable tubular device formed substantially tubular including wavy annular members arranged in an axial direction of the device with bent portions (118, 122). Shanley fails to teach deformable portions in the form of grooves as claimed by the Applicant, however, Palmaz teaches an analogous device and teaches that it is desirable to have grooves with a V-shaped bottom on the stent, inherently defining deformable portions. Furthermore, Palmaz discloses that it is desirable to have deformable portions at any portion of the stent. Therefore, as it would have been obvious to one having ordinary skill in the art at the time of invention to provide the stent, including the wavy annular portions and free bent portions of Shanley with grooves as taught by Palmaz in order to aid in migration of cells. Palmaz further teaches on page 8, in the first full paragraph that a variety of different groove patterns may be utilized including a diagonal pattern as seen in figure 8 that would inherently result in a spiral-like formation upon expansion, as well as grooves perpendicular to the axial direction which would result in an annular configuration. The modified Shanley fails to disclose the specific depth of the grooves as a percentage of the thickness of the device, however, the claimed range would be obvious to one of ordinary skill in the art, especially in light of figures 9 and 12 which would suggest that the depth ratio is approximately in the claimed range. The modified Shanley teaches that the deformable portions form an angle between 20-90 degrees with the axial direction of the device. The modified Shanley also teaches as mentioned above that the grooves may be placed anywhere and at any interval, therefore, the specific interval chosen would be considered a matter of obvious design choice, as the claimed range would perform equally well absent unexpected or undesired results. The modified Shanley consists of a stent having a frame structure. The modified Shanley further teaches the grooves on an inner surface of the stent.

With respect to claims 11-12, the claims are product by process claims. As such, the process by which the device is formed is not germane to the patentability of the device itself. The feature of annular or spiral deformable portions has been addressed above. With respect to claim 32, based on the teachings of Palmaz it would have been obvious to one of ordinary skill in the art to provide grooves (deformable portions) on the bent portions of the Shanley device as discussed in the previous office action. In addition, claims 38-43 are substantially similar to previously presented claims discussing location of the deformable portions as well as angles of the deformable portions. Furthermore, in view of the teachings of Palmaz, it would have been obvious to one of ordinary skill in the art to choose any specific interval between adjacent grooves (Palmaz, page 8).

Claims 14-19 and 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanley in view of Palmaz as applied to claim 1 above, and further in view of Alt et al. (U.S. 5,788,979). The modified Shanley discloses the claimed invention except for the device carrying a medicine. Alt teaches that it is well known and advantageous to provide a medicinal coating to stents (column 8). It would have been obvious to one of ordinary skill in the art at the time of invention to provide the modified Shanley with a medicinal coating as taught by Alt in order to deliver medicine to areas of the body once the device has been implanted. Alt further teaches a

coating comprising a biodegradable material (column. 6, lines 59-64), which can be used for a stent (col. 6, line 1). It would have been obvious to one having ordinary skill in the art at the time of invention to provide the device including the deformable portions disclosed by the modified Shanley with the coating taught by Alt in order to provide a more biocompatible implant that will not cause harm during degradation. Alt further teaches that the coating has the medicine added to it, and that the medicine can consist of an antibiotic.--

The following amendment to the Examiner's Answer was made to comply with requirements MPEP 1207.02 requiring restatement of points from previous office actions.


FENN C. MATHEW
PRIMARY EXAMINER